ABSTRACT
        The value of student participation in class
discussion is considered. An approach is suggested for college
teachers to help them better motivate and evaluate students who
participate in classroom discussion. Reliable, accurate, and
meaningful assessment of students' participation in classroom
discussion can be achieved if an instructor bases the assessment on
criteria that are known to all students, are reinforced, and are
operationally defined. The approach described involves the use of
behaviorally anchored rating scales (BARS) to assess student
performance. A series of statements are used to form a scale to
assess classroom performance. Students are involved in the
development of the appraisal instrument. Student views concerning
adequate classroom performance yield anchors or statements that have
similar meanings for students and the instructor. This approach
provides clear performance expectations for the student. The domain
of performance is explained as well as the indication of acceptable
and unacceptable behaviors. Steps in the development of BARS are
outlined. (SW)

Participation Performance and Behavioral Expectations

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The use of time for discussion in college classes
and the attendant need for student participation in dis-
cussions seem to be increasing, in general, in our col-
leges and universities. The purposes of this paper are
to identify the concerns that surround the matter of
student participation in class discussions and to sug-
gest an approach for college teachers to use which may
help them b :ome better motivators of students, better
evaluators, and, ultimately, better teachers. The sug-
gested approach responds positively to many of the
central problems associated with student participation
in classes.

Several investigators (Clarke 1985, Wood 1979,
Armstrong and Boud 1983) have indicated that structured
classroom discussions seem to be increasingly popular
with college faculty and students. The increase in in-
terest probably results from educators attending more to
student-centered approaches to teaching and learning.
As older students make up a greater proportion of col-
lege attenders these days, teachers encounter more stu-
dents who are able to engage in meaningful discussion.

Many older students have life experiences that can be discussed in relation to the topics being examined in class. Further, in many courses, particularly in upper division undergraduate courses and in lower level graduate courses, one finds that class participation may be weighted somewhat heavily as compared to other performance expectations in the course. It is not unusual to discover courses in which class participation performance is valued as being from 20 to 50 percent of the final course grade. In general, class participation in discussion is desirable because students' levels of involvement in the classroom have been consistently and positively related to reported growth -- both personal and academic.

VALUE OF STUDENT PARTICIPATION

In a thorough treatment of the topic of student participation in class discussions, Lowman (1984) addresses various educational objectives for discussion, including the development of thinking skills, the furthering of course content, improving student attitudes toward, and enhancing student involvement in discussion. Below are comments which address these matters.

Participation in discussion can be a most useful means of engaging students in the process of thinking. Students can test their assumptions, both implicit and explicit, as well as improve their approaches to problem solving. They can also o der and re-order sequences of events or activities to explore interrelationships, and examine what-if propositions.

With regard to content of courses, participation in discussion may assist students to integrate information obtained from readings or lectures. Asking students to discuss in class what they have learned requires them to demonstrate some understanding of the material: class discussion is a relatively safe way for students to exhibit independence -- practice for the time when they will be on their own (Lowman 1984).

Questions as st muli for discussion may center on students' values. Individuals become more aware of their own attitudes and values from listening and comparing their attitudes and values with those expressed by others. On an individual basis, discussion techniques can influence attitude change, increase sensitivity, motivation, and increase responsibility. Motivation to learn can be increased because students usually want to work for instructors who value their

ideas and who encourage them to be independent (Lowman 1984).

Use of discussion can help in developing a less authoritarian and/or teacher-centered teaching style, enhancing student-faculty relationships, and in promoting peer learning. As a process, discussion invites attention and it breaks up the routine of lecture. Well-led, focused discussion may substantially increase attentiveness.

ASSESSING PARTICIPATION

Assessment of class participation has been used quite extensively since the First World War in non-academic areas. The civil service, the armed forces, industries, and business firms have used it as a means of identifying and selecting persons with leadership potential (Clarke 1985, Bass 1954). Assessment of class participation has been used as a selection device for entry into various types of education. McMaster University Medical School, for example, evaluates applicants to the school based, in part, on the student's ability to function as a member of a small group during a simulated tutorial (Mitchell et al. 1975). One study

(Armstrong 1978) was reported to have found that stu-
dents prepared and participated effectively only in
classes that had class participation assessment.

Even with increased use of assessment of class par-
ticipation and with the recognition of the problems with
its use, there has been very little written about
assessment of this kind of activity. Much of what has
been written is of a descriptive nature wherein an
instructor-centered rating system is applied during dis-
cussion or at some later time. The rating systems are
usually derived from the instructor's experiences
(Greive 1975, Armstrong and Boud 1983, Clarke 1985,
Fisher 1975) as an instructor. If class participation
is intended to be a significant component of a course,
then it is important to discover meaningful, timely, and
relevant assessment methods.

PROBLEMS AND ISSUES IN ASSESSMENT

Most teachers would agree that objective assessment
of class participation is desirable. Perhaps a good
deal fewer would agree on the possibility of injecting a
substantial degree of objectivity into the process.
They argue that a teacher's personal likes and dislikes

can influence the judgment of a student's oral performance. The subjectivity of the assessment is thus underscored.

Besides the subjective aspect of evaluation and assessment, there are several other problems that require identification. Grading of discussion participation may tend to increase student anxiety, which, in turn, may inhibit discussion. Knowing that assessment is being conducted may place considerable pressure on students to participate in what they perceive to be a somewhat threatening environment.

The faculty member may assume there are several features of class discussion such as the frequency of engagement or interaction and the quality of the contributions made. For the instructor there may be substantial difficulty in the identification of these components, the valuing of these components, and difficulty may arise from the confounding of the components as observed and as assed. Faculty cannot be full participants in what is going on in the discussion and perform assessment at the same time.

As Lowman (1984) has observed, some faculty cannot effectively manage a discussion; other faculty tend to dominate a discussion so that what takes place is not a

discussion at all. Few, perhaps have really established
objectives and goals regarding why they want students to
discuss a particular topic. These matters all have a
bearing on the assessment of participation as well as on
the success of engaging in discussion.

There are other student-centered considerations
that have a bearing on the discussion. Some students
may attempt to dominate discussion thereby discouraging
other students from participating. This behavior will
demand management skills on the part of the instructor.
Some students are not motivated to engage in discussion
because the topic may be well beyond their grasp or be-
cause the topic is not interesting to them. Some stu-
dents cannot effectively engage in discussion because
they may not possess the required skills of listening,
speaking clearly and persuasively, and the like.

PERFORMANCE CRITERIA

The establishment of criteria for the assessment
and evaluation of a student's work, particularly work
regarded as contribution to class discussion, is perhaps
one of the most neglected aspects of assessment of stu-
dent performance. Clarke (1985) reports that the lack

of interest in establishment of criteria is manifest in the fact that books on assessment are practically silent on the topic of performance crite' a.

Criteria are critical factors in defining the performance that is expected and that is desirable. The expression of criteria can be made with varying degrees of specificity. Clearly, it seems insufficient to inform students that participation in class discussion, activities, and so on will be worth 30 percent of the final course grade and not inform them what participation means in an operational sense. By way of example, Clarke (1985) identifies several domains of criteria to guide students, such as:

Cognitive: the student must demonstrate
a knowledge of facts, etc.
Expressive: the student must demonstrate
the ability to make statements
with conciseness and with
clarity, etc.
Affective: the student must show attentiveness, interest, and enthusiasm,
etc.

Reliable, accurate, and meaningful assessment of participation performance can be achieved if an instructor bases the assessment on criteria which are known to all students, are reinforced, and, are operationally

defined.

AN APPROACH TO RESOLVING SOME OF THE PROBLEMS AND ISSUES

The approach that is explained below addresses several of the important problems and issues identified. The approach offers the possibilities that objectivity can be substantially enhanced while subjective assessments can be moderated. Further, explicit performance criteria can be identified and made known to all students and, because the performance criteria are explicit, the approach suggested serves to diminish anxiety in students as there is less "fear of the unknown." Because criteria are both known and operationally defined one could expect enhancement of management of discussion. As a side benefit, the approach requires student involvement in its development so students are participating from the start and are actively involved in generating performance criteria which they understand.

The approach described involves the use of behaviorally anchored rating scales, or BARS. For the past several years, I have experimented with and used such scales in several performance contexts. The fun-

damental research by Smith and Kendall (1963) guides the
development and use of the scale .. The use of the
scales has many practical applications in college teach-
ing and in the assessment of student participation.

WHAT ARE BARS?

Behaviorally anchored rating scales were designed
(Smith and Kendall 1963) as a behaviorally-based perfor-
mance assessment tool. Typically, they are a set of
scales corresponding to each of the major dimensions of
a job. On each scale are placed a set of anchors or
statements which illustrate behavior on the particular
job dimension. In the application of the method for
purposes of this discussion, the performance dimension
established is Participation in Class Discussion
(henceforth, participation). This is eneral and will
serve to illustrate the method. Obviously, one could
identify participation in class discussion as the "job"
and construct two or more scales to address quality,
quantity, and other dimensions.

For our performance dimension, participation, a
series of statements are used to form a scale against
which performance may be assessed. The development of

these statements or anchors requires some use of class
time at the beginning of the course and this scale con-
struction requires several steps. Depending on the
needs of the instructor, BARS are not typically general-
ized from course to course. That is, if one wishes to
use scales to assess performance it may be necessary to
repeat the development process with each class (group)
of students.

HOW BARS ARE DEVELOPED

Following is the step-by-step process by which the
scales are developed:

1. Explain to the students that participation is
   an important component of the course and of
   their grade. Further, a useful guid_ is to
   be constructed that will help them in their
   performance in the course.

2. Give each of the students 3 x 5 cards and ask
   them to write at least one example (preferably
   two or three) of each of the following:
       Poor performance in class discussion
       Adequate performance in class discussion
       Good performance in class discussion

   Collect the cards -- tell the student that the
   second round of the activity will occur at the
   next scheduled class meeting. Then, go about
   your planned activities for the remainder of
   the class session.

3. Have a panel of colleagues (two or three) or
   graduate assistants, honors students, etc.,

review the responses listed on the cards.
Ambiguous r ponses, duplicate responses, non-
behaviora' sodes, etc., must be removed.
The pane. nbers then re-write the remaining
items into the "expectations" format, e.g.
"The student could be expected to _____."
These statements are then typed as a list of
statements. My experience indicates that a
class of 15 to 30 students will have generated
a usable list of performance behaviors in the
range of from 22 to 28 statements.

4. The list is then given to the students at the
next scheduled class meeting. They are asked
to rank all statements (items) using 1 to rank
the lowest level of performance and 7 to rank
the highest level of performance. The students
are asked to carefully consider each item and
to be careful to make di tinctions regarding
level of performance by using roughly
equivalent quantities of 1's, 2's and so on
in their rankings. Students seem to take
this activity seriously.

At this point, each of the statements (items)
has a set of rankings or "scores." These
rankings for each statement are to be averaged,
so that for each statement we have an average
ranking. For each statement the standard
deviation of the rankings must also be calcu-
lated. Typically, the statements that have
standard deviations of less than 1.5 (for a
7-point scale) can be used to construct the
scale.

6. The final scale can be prepared. See Figure 1
for the format and general appearance. Place
the tatement you want to use on the scale at
the point approximating the average value of
the statement. At least six items must anchor
the scale. You may have a pool of items which
meet the standard deviation criterion, in which
case you have some lattitude in choice of
statements to anchor the scale.

7. Duplicate the scale, distribute it to the
students and discuss what it means and how it
is to be used. For example, have copies of the

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scale produced and every three or four weeks
during the semester give each student a copy of
the scale with instructor comments written on
it regarding behavior observed in relation to
scale anchors. You might tell students how
they need to improve. You can reinforce
positive behavior.

Figure 1 about here

The development of the scale is itself a learning
experience for those involved since it requires the stu-
dents to face the question of what constitutes good or
poor performance (Bushardt, Fowler, Debnath 1985). The
development of the scale yields anchors or statements
which should have similar meanings for all participants
-- students and the instructor. The review of perfor-
mance of any given student should be superior to most
other methods of assessment because of the availability
of specific, performance-related feedback. Areas in
which the student can show improvement can be
identified. Student participation in the development of
the appraisal instrument should result in greater stu-
dent acceptance of the evaluations tendered by the
instructor. A number of grade or points-awarded options
exist for the instructor in the use of scales such as
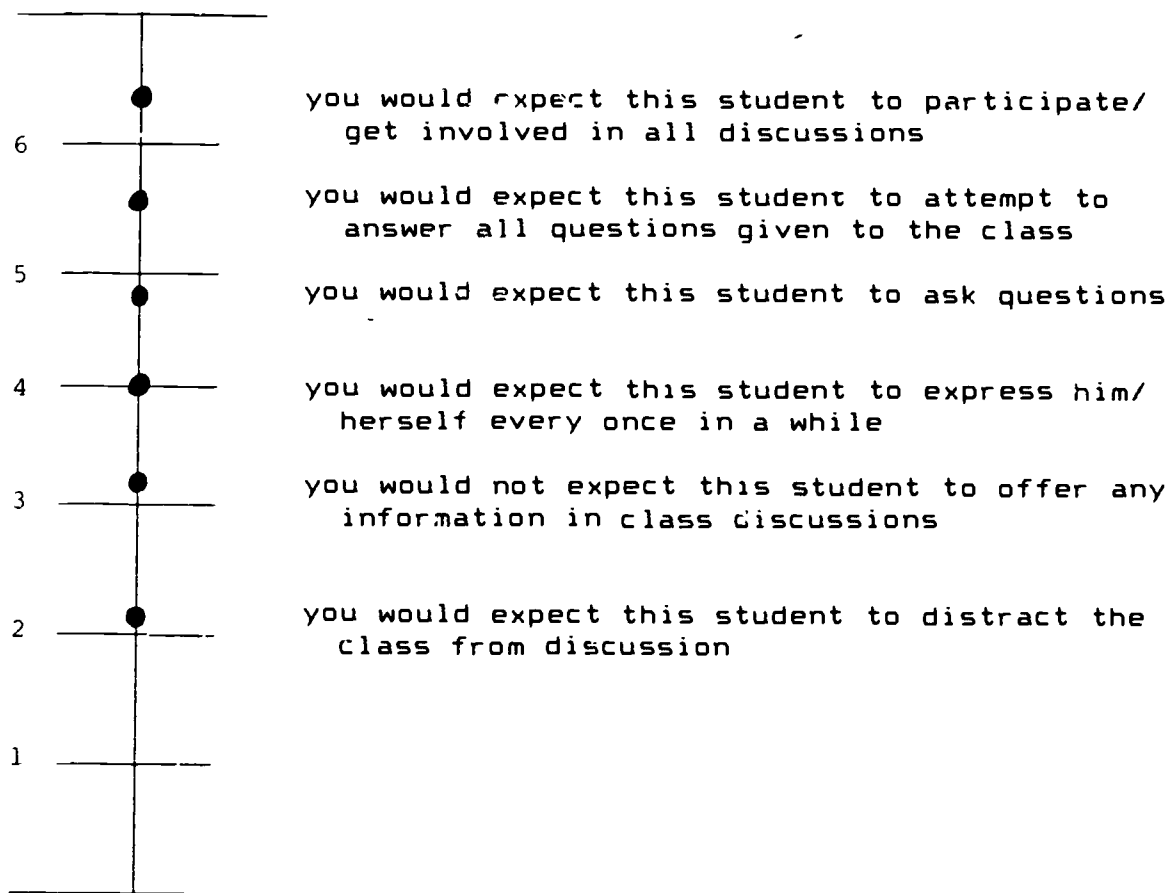these. The specific grading features should be an-

nounced to the class at the session when the completed
scale is presented to the class.

SUMMARY AND CONCLUSIONS

What has been demonstrated has been a short-cut
method of the application of the BARS approach (Green
et al. 1981). The approach yields much promise and can
be creatively applied in a variety of instruction
settings. The potential benefits are many as student
motivation is improved as a result of the identification
of clearer performance expectations. The domain of per-
formance is explained as well as the indication of ac-
ceptable and unacceptable behaviors. Subjectivity
regarding performance expectations can be diminished al-
though the instructor is still required tc make observa-
tions during class and record them thus diminishing in-
structor attentiveness, or recording observations after
class in which case the instructor observations may be
subject to recency bias. If expectations are made known
and if they are operationally defined we can expect stu-
dent anxiety to be diminished. While not the final
answer, the BARS methodology can help students and
faculty achieve educational objectives.

FIGURE 1

Performance Scale - Class Participation
(from a sophomore level course in marketing)

6 — you would expect this student to participate/
get involved in all discussions

you would expect this student to attempt to
answer all questions given to the class

5 — you would expect this student to ask questions

4 — you would expect this student to express him/
herself every once in a while

3 — you would not expect this student to offer any
information in class discussions

2 — you would expect this student to distract the
class from discussion

1

6 = good performance

4 = average/adequate performance

1 = lowest level of performance

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